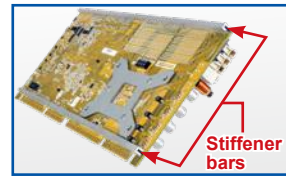
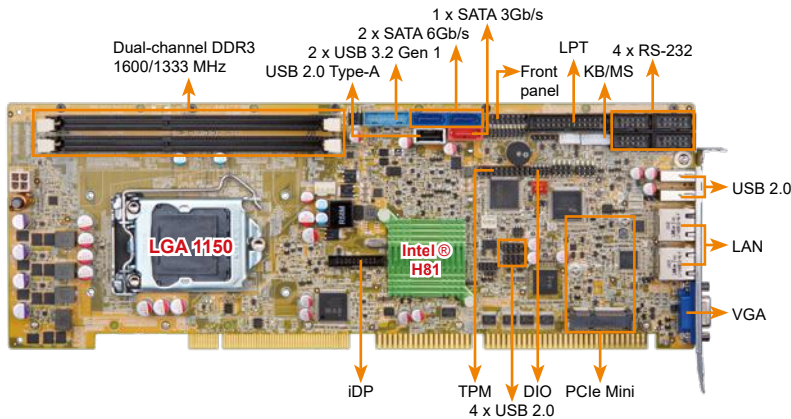


# WSB-H810

Full-size PICMG 1.0 CPU Card supports LGA 1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU with Intel® H81, DDR3, VGA, iDP, Dual Intel® GbE, PCIe Mini, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, RS-232, HD Audio and RoHS



**Enhanced stability**  
Strengthen the mechanism  
Prevent PCB bending

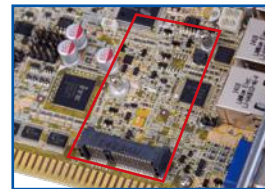
## PCIe Mini & mSATA connector



Support PCIe Mini & mSATA



◀ mSATA



Top-side PCIe Mini connector supports PCIe signal for half-size or full-size PCIe device. Solder-side PCIe Mini connector supports SATA 3Gb/s signal for full-size mSATA.



◀ PCIe Mini



## Specifications

- ◆ CPU  
4th generation LGA 1150 Intel® Core™ i7/i5/i3, Pentium® or Celeron® processor supported
- ◆ Chipset  
Intel® H81
- ◆ Memory  
Twp 240-pin 1600/1333 MHz dual-channel DDR3 & DDR3L SDRAM unbuffered DIMMs support up to 16 GB
- ◆ BIOS  
UEFI
- ◆ Graphics Engine  
Intel® HD Graphics Gen 7.5 supports DX11.1 and OpenCL 1.2, OpenGL 4.2 Full MPEG2, VC1, AVC Decode
- ◆ Display Output  
Dual independent display  
1 x VGA (up to 1920x1200@60 Hz)  
1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60 Hz)
- ◆ Ethernet  
LAN1: Intel® I217-LM Ethernet controller  
LAN2: Intel® I211-AT Ethernet controller
- ◆ Audio  
Support 7.1 channel HD Audio by IEI AC-KIT-888S-R10 kit
- ◆ External I/O Interface  
2 x USB 2.0
- ◆ Internal I/O Interface  
1 x KB/MS (1x6 pin) 2 x SATA 6Gb/s  
1 x LPT (2x13 pin) 2 x USB 3.2 Gen 1 (5Gb/s) (2x10 pin)  
1 x RS-422/485 (1x4 pin, P=2.0) 4 x RS-232 (2x5 pin, P=2.54)  
1 x USB 2.0 (180° Type-A) 4 x USB 2.0 (2x4 pin, P=2.54)  
1 x SATA 3Gb/s (AHCI supported, no RAID)
- ◆ Front Panel  
1 x Front panel (2x7 pin, power LED, HDD LED, speaker, power button, reset button)
- ◆ LAN LED  
2 x LAN LED (1x2 pin)
- ◆ Digital I/O  
8-bit digital I/O (2x5 pin)
- ◆ TPM  
1 x TPM (2x10 pin)
- ◆ SMBus  
1 x SMBus (1x4 pin)
- ◆ I<sup>2</sup>C  
1 x I<sup>2</sup>C (1x4 pin)
- ◆ Infrared Interface  
1 x Infrared Interface (1x5 pin)
- ◆ Expansion  
1 x Full-size PCIe Mini card slot (support mSATA)  
PCI and ISA signal via golden finger
- ◆ Watchdog Timer  
Software programmable supports 1~255 sec. system reset
- ◆ Fan Connector  
1 x CPU smart fan (1x4 pin)  
1 x System smart fan (1x3 pin)
- ◆ Power Supply: 5V/12V, AT/ATX support
- ◆ Power Consumption  
5V@3.4A, 12V@0.36A, Vcore\_12V@7.48A, 3.3V@1.42A, 5VSB@0.13A (Intel® Core™ i7-4770K 3.90 GHz CPU with 8 GB (two 4 GB) 1333 MHz DDR3 memory)
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 338 mm x 122 mm
- ◆ Weight: GW: 1000g / NW: 260g
- ◆ CE/FCC compliant

## Features

- Full-size PICMG 1.0 with LGA 1150 Intel® CPU
- Two 1600/1333 MHz DDR3 SDRAM DIMM slots support up to 16 GB of memory
- Dual Intel® Gigabit Ethernet LAN controller
- SATA 6Gb/s and USB 3.2 Gen 1 (5Gb/s) supported
- TPM v1.2 hardware security function supported by TPM module
- Stiffener bars
- IEI jumper-less function

## Packing List

1 x WSB-H810 single board computer	
2 x SATA cable	1 x QIG

## Ordering Information

Part No.	Description
WSB-H810-R10	Full-size PICMG 1.0 CPU card supports LGA 1150 Intel® Core™ i7/i5/i3, Pentium® and Celeron® CPU with Intel® H81, DDR3, VGA, iDP, dual Intel® GbE, PCIe Mini, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, RS-232, HD Audio and RoHS
19800-000049-RS	LPT flat cable, 240mm, P=2.54
19800-000075-RS	PS/2 KB/MS cable with bracket, 220mm, P=2.0
19800-010500-200-RS	USB 3.2 Gen 1 (5Gb/s) cable with bracket, 450mm
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
32200-074800-RS	RS-422/485 cable, 200mm, P=2.0
32205-000702-200-RS	RS-232 cable, 230mm, P=2.54
AC-KIT-888S-R10	Realtek ALC888S 7.1 Channel HD Audio peripheral board, RoHS
CB-USB02-RS	Dual port USB 2.0 cable with bracket, 300mm, P=2.54
CF-1150SB-R11	Special cooler kit for LGA 1150, high-performance compatible, 65W
CF-1150SC-R20	Special cooler kit for LGA 1150, 1U chassis compatible, 65W
CF-1150SE-R11	Special cooler kit for LGA 1150, high-performance compatible, 95W
DP-DP-R10	DisplayPort to DisplayPort converter board (for IEI iDP connector)
DP-DVI-R10	DisplayPort to DVI-D converter board (for IEI iDP connector)
DP-HDMI-R10	DisplayPort to HDMI converter board (for IEI iDP connector)
DP-LVDS-R10	DisplayPort to LVDS converter board (for IEI iDP connector)
DP-VGA-R10	DisplayPort to VGA converter board (for IEI iDP connector)
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17